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IN THIS ISSUE

PAGE

United States Agricultural Exports Are Big Business 151

Chemical Coffee Curing 155

Planning in Czechoslovak Agriculture . . 157

Coffee Areas of the World, 1952, in Relation to Rust Disease 160

People and Point Four 161

Yogurt—Turkish Style 165

FRONT COVER

Guatemalan Women

These Guatemalan women, accustomed to carrying loads on their heads, prefer outdoor markets, where they can move about easily. Customs and preferences like these are highly important to Point Four planners.

BACK COVER

Map of Czechoslovakia

In Czechoslovakia, about 70 percent of the farm land is still privately owned, but the government is attempting to adapt private farming to a socialized economy.

NEWS NOTES

United States as an Importer Of Livestock Products

Although the United States produces much more meat, milk, and eggs than any other country, and ranks fourth in the production of wool, it was second only to the United Kingdom in 1951-52 in the importation of livestock, meat, wool, and dairy products as a group. In that fiscal year, United States meat imports reached about 500 million pounds, which was about one-fifth the quantity taken by the United Kingdom in the same period. The value of United States imports in that year reached $139 million for meat, $262 million for wool, and $30 million for dairy products.

The size of the animal industries in the United States requires that strict sanitary safeguards be applied to the admission of imports. Changed disease conditions in the two important supplying countries of Canada and Mexico may affect imports of cattle and meat into the United States in 1952-53. Barring further disease outbreaks, live cattle and fresh meat will enter from Mexico after September 1, 1952. Canada has been unable to ship cattle or fresh meat since late February 1952 owing to an outbreak there of the foot-and-mouth disease, but the country is apparently making satisfactory progress in exterminating the disease.

Owen L. Dawson to FAO

Owen L. Dawson, veteran agricultural attaché, has requested retirement from the U. S. Foreign Service to become chief economist of the regional office of the Food and Agriculture Organization of the United Nations at Bangkok and, concurrently, head of the agricultural division of the UN Economic Commission for Asia and the Far East. Mr. Dawson was an agricultural officer abroad for 24 years, more than 20 of which he spent in the Far East.

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FOREIGN AGRICULTURE ALICE FRAY NELSON, EDITOR

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United States Agricultural Exports Are Big Business

By FRED J. ROSSITER

Agricultural exports from United States 1951 production reached approximately $4 billion—probably an all-time high in total value. In fact, income from agricultural exports has been persistently high in recent years: 1947-51 saw exports of higher value (a $3.5-billion average) than any other consecutive 5 years in our history. If the returns from these exports were evenly divided among American farmers, each one's share at the port of shipment would be about $700 a year.

In volume, agricultural exports have broken no records recently, although the average for the past 5 years tops all other 5-year averages in the past quarter century. Earlier than that, higher records were set in 1918-22, when volume of farm exports was 15 percent greater than in the recent period, and in 1897-1901, when it was 10 percent greater.

Several factors have contributed to the strong export demand for our agricultural supplies since World War II. Among them are (1) decreased supplies available from other exporting areas, (2) more United States foreign aid funds, and (3) improved economic situation in several areas.

Although the reduced agricultural exports available from Argentina, Burma, India, Indochina, Korea, Manchuria, Pakistan, Taiwan, the Soviet Union, and the European satellites have created a strong export demand for many North American agricultural commodities, that demand has not been satisfied. The limiting factor has been the shortage of dollars in many foreign countries. Prices that several of these countries have paid in soft currencies for many commodities have far exceeded the United States market price.

Foreign aid, it is true, has been a factor in the larger volume of agricultural exports during the past 5 years. But percentage of agricultural commodities financed directly by aid funds has been steadily declining since 1949. In the past year, only about 20 percent of our exports were purchased by aid funds; yet the total value of all agricultural shipments abroad exceeded any previous marketing year in history.

Increased employment and an improved economic situation in the war-devastated countries of Europe and Asia are now resulting in expanding purchases of our farm products. The improved economic position of many other countries, such as Canada, several Latin American countries, and the Union of South Africa, has increased their buying power and resulted in their taking a larger volume of our agricultural exports, too.

The most important market for our agricultural commodities continues to be Western Europe. Its relative importance has somewhat diminished in the postwar period, however, since it now repre-

Grain elevators, Duluth, Minnesota. From elevators across America, wheat has been moving abroad in record quantities since the war.

Mr. Rossiter is Associate Director, OFAR.

sents a market for about 50 percent of our total exports, compared with more than 60 percent before World War II, and more than 80 percent before World War I. Our leading customers in Europe continue to be the United Kingdom followed by Western Germany, Italy, France, the Netherlands, and Belgium.

In the Western Hemisphere, Canada, Cuba, and Mexico are the largest importers of our agricultural commodities. The Western Hemisphere is now a market for 20 percent of our farm products, compared with 14 percent during 1934-38.

In Asia, our markets have fluctuated widely. Japan and, more recently, India are now the main markets for United States agricultural exports.

Cotton, wheat, and tobacco are still the big three items leading the parade in total value of exports. Lard, a long-time important export commodity, except for 1935-40, is again moving abroad in volume. Several new commodities have attained important stature in the export field in recent years—rice, soybeans, and sorghums. Corn and barley, too, have attained some importance in the postwar period. Fruits, especially pears and apples, which were popular exports prior to World War II, are having trouble finding export outlets during the postwar recovery period.

The United States, being the world's greatest exporter of food, cotton, and tobacco, is tremendously concerned about the future trend of agricultural exports and the impact it will have on the welfare of farmers and on the national economy. In looking at the volume of agricultural commodities that may be exported from the United States in years to come (taking for granted the use of less and less economic aid funds), two factors become immediately important: (1) to what extent will foreign countries be able to earn dollars with which to purchase their needed agricultural commodities from us, and (2) will the economic level of the people living in foreign countries improve to the extent that their purchasing power will increase and the effective demand for American farm products be enlarged?

Answers to these questions lie in the future. Now, however, many countries have an additional means of earning dollars—namely, our defense spending abroad, which should aid them in procuring their agricultural wants from the United States. And, in the long run, our technical assistance program promises to help foreign countries improve their living standards and economic level, and thus increase their ability to buy our farm commodities.

Rice

Rice exports during the 1951-52 season, amounting to about 800,000 short tons, smashed all records. The United States was a net rice importer until about 1920, but since 1926 it has steadily become a more important net exporter, until now it is the world's third largest rice exporting country. Cuba continues to be our No. 1 market, which, in recent years, has been annually taking more than 200,000 tons. This past season more than 400,000 tons have been shiped to Asiatic countries. How long this Asiatic market will continue is unpredictable, but if rice can be purchased with earned dollars, at reasonable prices, Asia may be a sizable export outlet for some years to come.

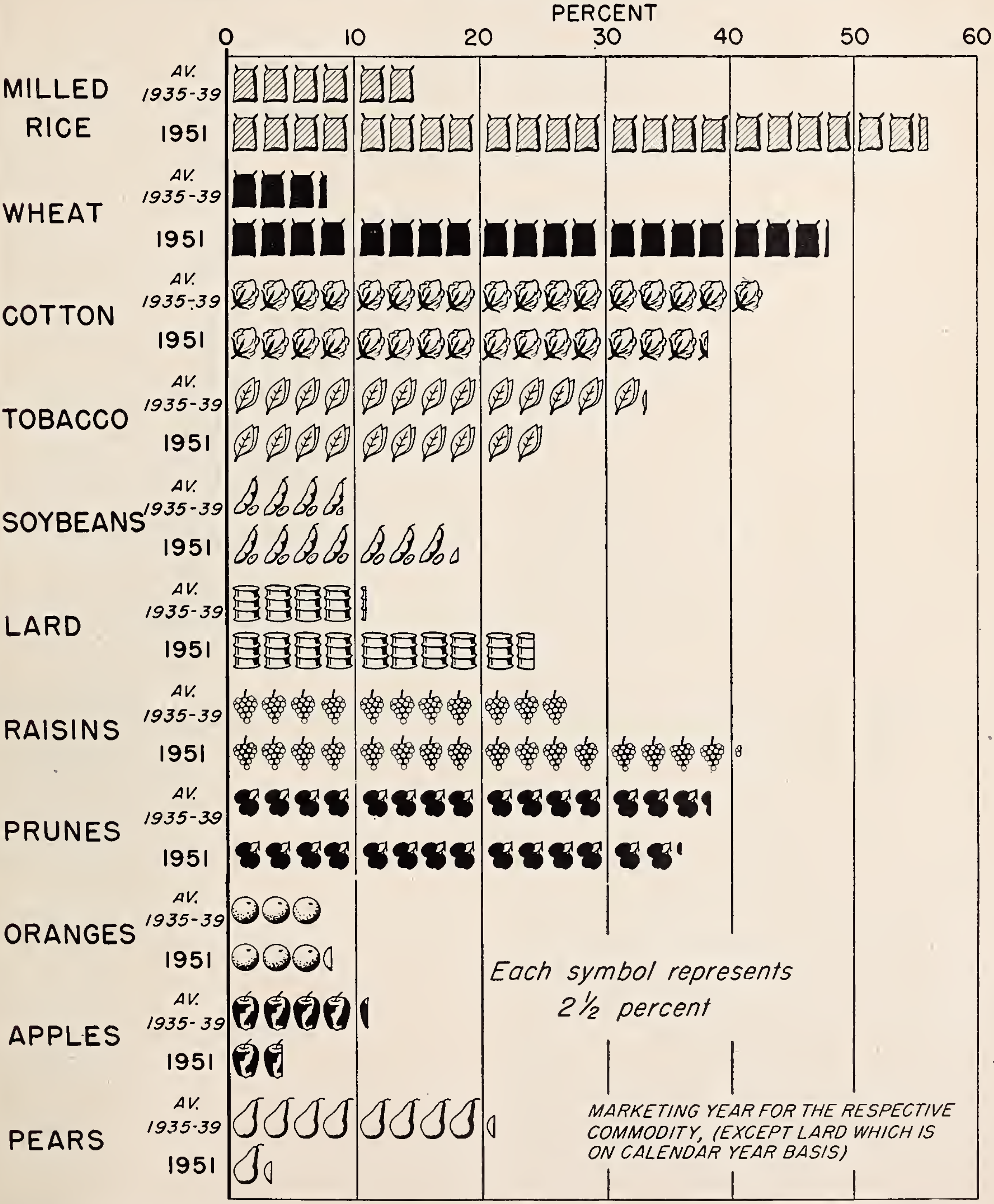
Wheat

Total wheat and wheat flour exports during the past marketing year amounted to 470 million bushels, the third largest on record. The United States during the past 5 years has exported more wheat than was shipped in any similar period in our history. Furthermore, it was the largest quantity that any country in the world has ever exported in a similar period. This record volume was made possible by our tremendous domestic wheat production, and the large exports were due in part to the rice situation in the Far East and to the decreased export supplies of grains available from Argentina and Eastern Europe. Last year, 53 percent of our wheat and wheat flour exports were shipped under the International Wheat Agreement. In recent years the United States has been supplying nearly half of the wheat in international trade.

Coarse Grains and Sorghum

Coarse grains (corn, oats, and barley) and sorghum exports have in the past 5 years been at the highest level since the aftermath of World War I. These commodities have been shipped to European countries for both feed and food and to Asiatic countries almost entirely for food. A strong export demand has continued for these commodities, due in part to the reduced supplies available from Argentina and Eastern Europe.

U.S. EXPORTS OF SELECTED AGRICULTURAL COMMODITIES AS A PERCENT OF PRODUCTION



Each symbol represents 2½ percent

MARKETING YEAR FOR THE RESPECTIVE COMMODITY, (EXCEPT LARD WHICH IS ON CALENDAR YEAR BASIS)

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Cotton

Cotton, with exports in the past marketing year amounting to about 5.8 million bales valued at roughly $1.2 billion, continues to be our principal agricultural export item. Since the war a number of conditions have combined to hold our cotton exports in check—the dollar difficulties of our principal customers, the higher price levels that have prevailed, the increased availability of rayon, production of which outside the United States has increased more than fivefold since 1933. In spite of these handicaps, American cotton has been in relatively strong demand. Average exports since 1947-48 (omitting 1950-51, when of our own volition we applied restrictions) have been some 5.6 million bales a year. While in quantity this is substantially less than the average of 8.4 million bales exported annually in the 10 years 1924-25/1933-34, in value our cotton exports have averaged more than 50 percent higher in the postwar years.

Tobacco

Exports of unmanufactured tobacco during 1951-52 were the third largest on record, totaling 585 million pounds, valued at more than $300 million. The export demand for flue-cured tobacco continues strong, in spite of increased production in many foreign countries. The higher exports are primarily attributable to larger takings of flue-cured leaf by the United Kingdom, Sweden, Spain, Belgium, and Australia. The largest shipment to the United Kingdom, our most important export outlet, was in part for stock replacements this past season.

Soybeans

Soybeans, including soybean oil, which we were importing from Manchuria in the 1920's, have suddenly become an important export commodity. Our record exports were from the 1950 harvest, when shipments abroad of soybeans and soybean oil, in terms of beans, totaled about 79 million bushels. With the reentry of Manchurian soybeans in world markets, our exports from the 1951 harvest have met severe competition and will equal less than 50 million bushels.

Lard

Lard exports, while not breaking records, have been moving abroad in fairly large volumes in the postwar period. European countries, such as the United Kingdom and Germany, have traditionally been our principal markets, but another outlet of considerable significance has recently developed. That outlet is Cuba, which took about 140 million pounds in each of the last 2 years.

Fruits

The export of both fresh and dried fruits has been plagued by currency controls in many of the principal foreign markets in the past few years. It has been necessary to give assistance in effecting exports during a number of postwar years. A slow but steady improvement has been noted, however, during the past 4 years. The 1951 exports of all fresh fruit totaled 597,000 tons, compared with 475,000 tons in 1950. The comparable 1938 export figure was 739,000 tons.

The shipment of dried fruits in the postwar period has had its ups and downs, largely due to lack of currency abroad and increased production in other parts of the world, especially in Australia, Turkey, and Argentina. During 1951, exports of dried fruit converted to a fresh basis totaled 497,000 tons, compared with 279,000 tons the preceding year. In 1938 they totaled 882,000 tons.

The principal outlets for our fruit exports continue to be in the Western European countries, though other countries show modest increases.

Dairy Products

The current and potential contribution of dairy products to our export trade in agricultural products is frequently overlooked. The value of dairy products exported in 1951 amounted to $121 million. In fact, the average for the past 5 years—$172 million—is the largest in peacetime history. The value of such dairy products as evaporated, condensed, and dried whole milk, milk-base foods, nonfat dry milk, and malted milk and other special dairy products exported last year totaled more than $93 million. Butter and cheese exports have never been important in peacetime but equaled $26 million last year.

Exports in 1951 accounted for nearly 70 percent of the United States production of dry whole milk packed in cans and for nearly half of the canned condensed milk produced in that year. Exports of these two products and of evaporated milk, nonfat dry milk, and milk-base foods furnish an important part of our agricultural exports to Latin American markets.

Chemical Coffee Curing

By RALPH E. HANSEN

Coffee growers and coffee drinkers both stand to benefit from the new chemical coffee curing process developed recently at the Salvadoran-United States cooperative agricultural experiment station in El Salvador. For coffee growers, the new process means a quicker, cheaper, and more certain curing method. For coffee drinkers, it means a more uniform product, better flavor and aroma, and, perhaps, in time, a lower cost.

The new process is concerned only with the second step in the preparation of coffee for the market—freeing the coffee bean from the pectic-gel coat that surrounds it (the first step consists of separating the thin skin, called coffee pulp, from the bean). Essentially, the new method calls merely for substituting the action of caustic soda for the natural bacterial action in the fermentation process.

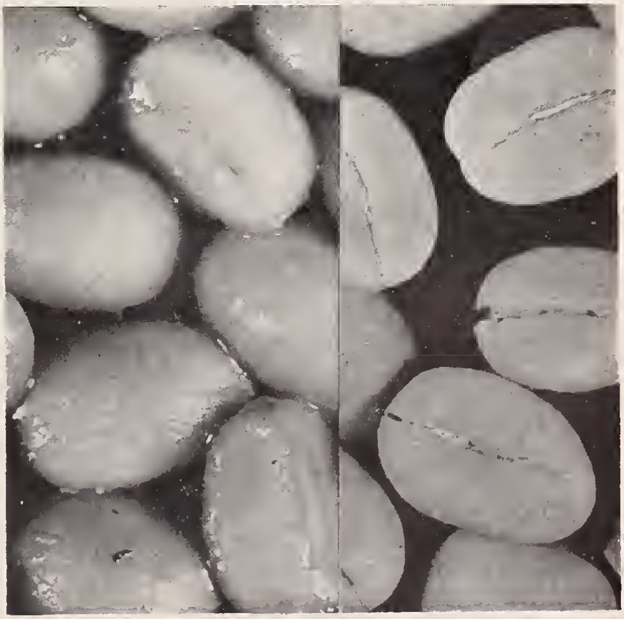
Coffee producers in El Salvador have long been aware of the shortcomings of their fermentation methods and are highly interested in perfecting them. Several plants last season used the new chemical process and many others plan to use it on the next coffee crop.

The president of El Salvador's Coffee Growers Association, Agustin Ferreiro, recently commented that "only a few pieces of research work done on coffee processing and curing could have aroused the interest and have been as important as that done at the Centro Nacional de Agronomía by Roberto Carbonell and Tomas Villanova. The mere fact of drastically reducing the time required to remove the mucilage from the coffee beans—up to now not efficiently done—means a tremendous progress in coffee curing techniques."

Freshly pulped coffee has a thick mucilaginous layer that covers the two seeds, or beans, of each fruit. This pectic gel is strongly attached to the seeds and has to be removed before the coffee can be dried and roasted.

In the old fermentation process the mucilage is removed by placing the seeds in fermenting tanks, where natural enzymes, bacteria, fungi, molds, and yeasts digest and transform it into a soluble product that can be washed away with water. Fermentation usually takes 20 to 36 hours and there is no way to speed up the process or to tell just how long it will take. As a result, plant owners are often confronted with the problem of not having enough tanks at the peak of the season. Sometimes, fermentation is so slow that coffee has to be put into the drying yards before the mucilage has been completely removed. Consequently the grade of the final product is not uniform and very often the flavor and aroma of large quantities of coffee are poor, which of course, lowers the value. Sometimes, too, coffee is not left in the tanks long enough—or is left in too long—because processors have had no way to tell just when the mucilage has been completely digested. They have depended on punteros—people who have had long experience in curing coffee and who determine from a small sample when the digestive process has been completed—and punteros sometimes fail, for bacterial action in a large tank is uneven.

Not only do flavor and aroma suffer in the old fermentation process but the weight in terms of green coffee is also reduced. During the fermentation process, some solid materials of the coffee bean are transformed into gases that are lost



Fresh coffee beans (left) have a gel-like coat, which can now be removed easily and inexpensively by chemicals, leaving the beans uniformly clean (right).

Mr. Hansen is Information Adviser, Centro Nacional de Agronomía, San Salvador, El Salvador.

through diffusion. As fermentation proceeds, yields are increasingly smaller. A 9-percent loss in green-coffee weight was recorded on a 40-hour fermentation in Santa Tecla.

In the new chemical process, green-coffee weight losses are greatly reduced because of the rapidity of the process—it takes less than an hour to free the coffee beans from their cover of gel. The seed does not have enough time to transform its solids into gases.

During the 1951-52 crop season, when something more than 430,000 pounds of coffee berries was chemically processed in El Salvador, yield gains ranged from 1 to 3 percent.

Several features in addition to speed recommend the new process to plant owners. For one thing, it requires no elaborate equipment. What equipment is required—only some pipes and valves—is inexpensive and easy to install. And the caustic soda, which is manufactured in El Salvador and is available in large quantities nearly everywhere in the world, costs little. Too, there is a possibility that the chemically digested pectin can be recovered as a byproduct, which would increase the profits of the coffee curing industry. Profits would be higher, too, because the new process takes the guesswork out of curing.

Because the plant owner can control the curing time, he can put his whole operation on an assembly line basis, thereby lowering his costs and, at the same time, producing a coffee of uniform quality.

Coffee drinkers are, of course, the ultimate test of any improvement in coffee production. Coffee that has been chemically cured should certainly pass the test, for it will have fuller flavor and aroma and less variation in quality from pound to pound.

Coffee curing tanks in El Salvador. The equipment used in the new chemical coffee curing process is inexpensive and easy to install.

Planning in Czechoslovak Agriculture

The integration of private farms in the Five Year Plan.

By ERNEST KOENIG

The preliminary results of land reform in Czechoslovakia since the end of World War II were described in FOREIGN AGRICULTURE *for July 1950. The present article aims to show how, pending complete collectivization of agriculture, the Communist regime attempts to integrate production and deliveries of the remaining private sector of agriculture with the over-all planning of its socialized economy. At the end of 1951, all together 25 percent of the total agricultural land of the country had been socialized—8 percent in state farms, 17 percent in "Unified Agricultural Cooperatives" (which are an early development stage in the movement toward the Soviet-type kolkhoz). If account is taken of the developments in the first half of 1952, it may be assumed that 70 percent of the agricultural land is still privately owned.*

With the inception of the Five Year Plan in 1949, government direction of the economic life of Czechoslovakia assumed the characteristics of all-inclusive central planning.

Under such circumstances the role of the entrepreneur is, to say the least, extremely limited. He is deprived, partly or to a large extent, of one of the essential functions he performs in a market economy—namely, decision-making on purchases, production policies, and marketing. A fully planned economy is thus incompatible with private property in means of production, for it in effect abrogates the right of the individual to dispose of resources.

When the Five Year Plan began, the industrial and commercial sector of the Czech economy was largely socialized so that, in this respect, the preconditions for over-all planning had been fulfilled. Agriculture, however, was still in private hands, and, even by the end of 1951, the greater part of agricultural land was still owned and farmed by independent peasants. Consequently a device had to be found for making private farming compatible with over-all planning, or, as the Communists say, "a bridge between individual and socialist production" had to be built. The device that was chosen, called "contracting," is a special feature of agricultural planning in present-day Czechoslovakia that distinguishes it from that of other Communist countries.

Planning

As far as agriculture is concerned, the first Five Year Plan was drawn up by the Ministry of Agriculture and the Ministry of Food in cooperation with the Central Planning Office. Production and supply targets were set for each year of the planning period. Subsequently a yearly operative plan has been developed at the beginning of each year on the basis of the over-all plan. This annual operative plan involves the stipulation of national goals, taking into account past experience and the development potentialities of the period. The plan then is broken down on a regional basis, with production goals assigned to the various regions according to their assumed ability to produce, and is sent to the regional authorities. They, in turn, assign subgoals to the individual districts in their regions and forward these district plans to the district authorities. The latter proceed in the same way with respect to the villages under their jurisdiction, and the village authorities (who represent the lowest echelon of the public administration) examine the plan with regard to the productive capacity of the individual farms.

The aim of forwarding the original draft of the operative plan in such descending order is to test its feasibility and to fill it with concrete details not available on a higher level. The lower echelons have the right to modify the plan, to make counter-proposals, and to express their agreement or disagreement with the proposals of the higher authorities. Then the modified plan (also called counter-plan) goes back in the same way that it was handed down.

On the basis of the operative draft and the counterplan, the definitive plan is established by the two Ministries and the Central Planning Office. In this decision these bodies exercise their authority to modify the proposals of the subordinate echelons and to make final determinations. The definitive plan becomes law and the tasks assigned by it are

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Mr. Koenig is Agricultural Economist, Western European and African Division, Regional Investigations Branch, OFAR.

binding for the whole country.[1] Concurrently with the definitive plan a financial plan is worked out by the government. It fixes prices for the commodities to be produced as well as for means of production with which agriculture is to be supplied in order to carry out its tasks.

Contracting

On the basis of the final plan, farmers must enter into contractual agreement to carry out the production and delivery tasks assigned to them by the local authorities. The contracts are made between the Local National Committees (the village administrations) and the individual peasants within a time limit fixed by the Ministry of Agriculture.[2] Responsibility for the fulfillment of the plan on a regional, district, or local basis rests with the respective organs of the public administration. Yet the individual producer—not the various public agencies that have but supervisory and controlling functions—remains the decisive factor in the plan's fulfillments.

The Local National Committee is not the only signatory that acts on behalf of the state in concluding contracts with the peasants. A second agency that is a party to the agreement is the Central Agency for Trading in Agricultural Products.[3]

If a farmer objects to the production tasks allotted to him and refuses to sign the contract, the matter is submitted to the District National Committee (the administration for the next larger territorial unit). This body settles the dispute with finality. The peasant will probably acquiesce in its decision, for not conforming might entail serious consequences. If a peasant fails to fulfill the production tasks stipulated in the contract, the Local National Committee has the right to arrange for the necessary labor to carry out these tasks at the expense of the peasant. (This may amount to confiscation in the case of the "village rich.") Should a farmer disagree with the delivery obligations assigned to him, he will, nevertheless, be forced to meet them. In case he is unable to do so because of unavoidable circumstances, as judged by the National Committee, they may be decreased.

As to the content of the peasant contract, it first indicates the area of arable and agricultural land owned or rented by the farmer and gives a detailed breakdown of this land into cropland, gardens, orchards, meadows, pastures, etc. It is further subdivided into several parts showing production and delivery obligations with respect to crops and livestock products. In the section on livestock production the anticipated number of livestock at the beginning and at the end of the year is stated. Even the quality of livestock is specified (e.g., select breeding stock, ordinary livestock, livestock by age groups, etc.). The section "delivery tasks" shows the planned increments in animal production in terms of quarterly increase in live weight, and the planned quarterly output of milk and other products (eggs, wool, honey) to be delivered. The expected yearly average milk yield per cow and the yearly average egg yield per hen are also registered as contractual obligations. The section dealing with crop production states the area to be sown, the quantities to be harvested, the expected net yield per hectare, and the quantities to be sold under obligatory delivery quotas.

In the contract, the farmer also pledges himself to till the soil in accordance with the directives of the Local National Committee or the local production cooperative; to ask the committee for assistance in case his draft power or mechanical implements are insufficient to carry out his tasks; to use the services of State Tractor Stations if available; to use for particular crops only such fertilizers as prescribed by the Ministry of Agriculture; etc.

Frictions and Shortcomings

Planning and contracting do not operate without friction. Great difficulties are encountered in establishing plans and still greater ones in making them workable. At least in its technical aspects, and as far as production is concerned, the plan cannot be entirely imposed from above if it is to succeed, because even the most omniscient planning authority is incapable of knowing local peculiarities without the counterplan. Forwarding the preliminary plan to the village council and from there to as many individual peasants as possible, discussion of the peasants' ability to comply with the plan, their counterproposals, and the counterplan in general are essential even for a partial success of the plan.

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[1] The final plan not only sets production and delivery targets, but also contains provisions for supplying means of production—fertilizer, seed, breeding stock, etc. These targets for supplying the means of production are, however, decreed from above and not subject to the counterplan procedure.

[2] State farms have their plans directly assigned by the Ministry of Agriculture. Their targets are in general higher than those of individual farms. Delivery (but not production) goals of production cooperatives (collectives) are lower than those of large peasants. In villages with production cooperatives, it is the cooperative together with the Local National Committee that represents the state with respect to contracting. We are concerned here not with the application of planning to state farms and collectives but only with its operation in the private sector.

[3] This agency, created in 1948, is a public enterprise that has the exclusive right to purchase agricultural products from farmers, to store and process them, and to distribute them. The marketing of all agricultural products (with the exception of certain minor crops that can be freely sold on local markets) is covered by the activity of this organization.

This does not mean, of course, that the opinion of the individual peasant will prevail, nor does it imply that the individual peasant is concerned with the final outcome of the plan. He is more interested in his own particular advantage than in the public food supply and will do everything to influence the plan in this sense. Nevertheless it has been found indispensable to consult him.

Establishment of prospective delivery quotas greatly influences the setting of production targets. The magazine, *Zemedelsky Pokrok,* in January 1950 reports for instance that "The duty of delivering certain quotas influences agricultural planning more than is good. Instead of concentrating all their energy on increasing production and productivity the peasants still try to decrease the planned yields [in the counterplan] in order to furnish only small delivery quotas." Consequently, the final plan probably falls short of real production.

Another impediment to successful planning, in the view of the Communist government, is said to consist of repeated misunderstandings of the fundamentals of the "class struggle in the village." If related to planning and contracting, these fundamentals require that normal production targets, but discriminatory delivery quotas, be imposed on the "village rich." In general they require that a village be divided into six classes according to the size of land holdings (0-2 hectares, 2-5, 5-10, 10-15, 15-20, and more than 20 hectares). The total production task is first to be distributed among these groups and then assigned to the peasants within each group in accordance with their productive capacity. The allocation of delivery quotas should normally show increasing proportions of produce to be delivered per hectare of land as allocation proceeds from lower to higher size groups. The increase in these proportions should be in excess of what would correspond to the larger marketable surpluses from larger size farms. Finally, farms of more than 20 hectares must deliver everything in excess of their operative requirements in food, seed, feedstuffs, etc.

In actual practice, planning and contracting at the local level seem to be largely dependent on the social stratification of the village and the political and personal influence wielded by different groups of the village population. If small peasants have the decisive word in the local administration, they may attempt to put the burden of production and delivery tasks on larger peasants or on the "village rich," under the pretext of the class struggle slogan. Conversely, where the influence of medium or large peasants prevails, the reverse may happen. In either case such practices will not only be inimical to one or the other section of the peasantry, but will also lower output and deliveries of the whole village.

A second type of deviation from official rules consists in the "disappearance" of arable land. So-called black areas are created; that is to say, less land is included in the contracts than is actually under cultivation. This problem was discussed in *Zemedelsky Noving* on January 25, 1952: "The area of arable land decreases from year to year according to reports from several communities. . . . Some changes are justified; others occur without the permission of the regional authorities. . . . Alone in the Pardubice region, the area of arable land, i.e., surveyed land as registered in the land cadasters, exceeded by 15,000 hectares the area reported by peasants [in contracts] on the basis of which the People's administration establishes its plans." This practice presupposes collusion among all strata of the village population and a more or less solid front vis-à-vis the authorities. In some cases, according to the June 6, 1952, issue of *Zemedelsky Noving,* even the latter are partners in such a scheme: "[Failure in local planning] occurred especially where the 'village rich' succeeded in influencing the [local] planning commission or the council of the Local National Committee." A special case of collusion, which is never explicitly reported but which can be inferred from newspaper articles, consists in collaboration between small and "rich" peasants in marketing. Small and medium peasants are allowed to sell that part of their product that exceeds their delivery quota on the "free market"; rich peasants are not allowed to do so. Hence "village rich" sometimes enter into agreements with small peasants and sell the produce from black areas on the free market through the intermediary of the small peasant. The proceeds are then divided among all participants.[4]

Conclusion

Obviously a system that attempts to combine private enterprise with rigid directives from the central authorities must lead to serious difficulties. Since the partial right accorded individual peasants to codetermine production by way of the counterplan is more apparent than real, there remains a persistent gap between the intention of the planners and the response of the peasants. Yet it appears that the method of planning and contracting has not been a failure. There are credible reports to this effect. Even if production and deliveries of agricultural commodities deviate significantly from the official plan, contracting still remains a potent means by which the government not only obtains evidence of the performance of individual farmers, but also broadly influences the pattern of production and distribution. It is thus able to follow the flow of production and supplies and to intervene if they differ from preconceived goals. The machinery is cumbersome and adds to the stringency under which the peasant operates.[5] But it is likely to remain in force so long as agriculture is not completely socialized. And this may still take a good while.

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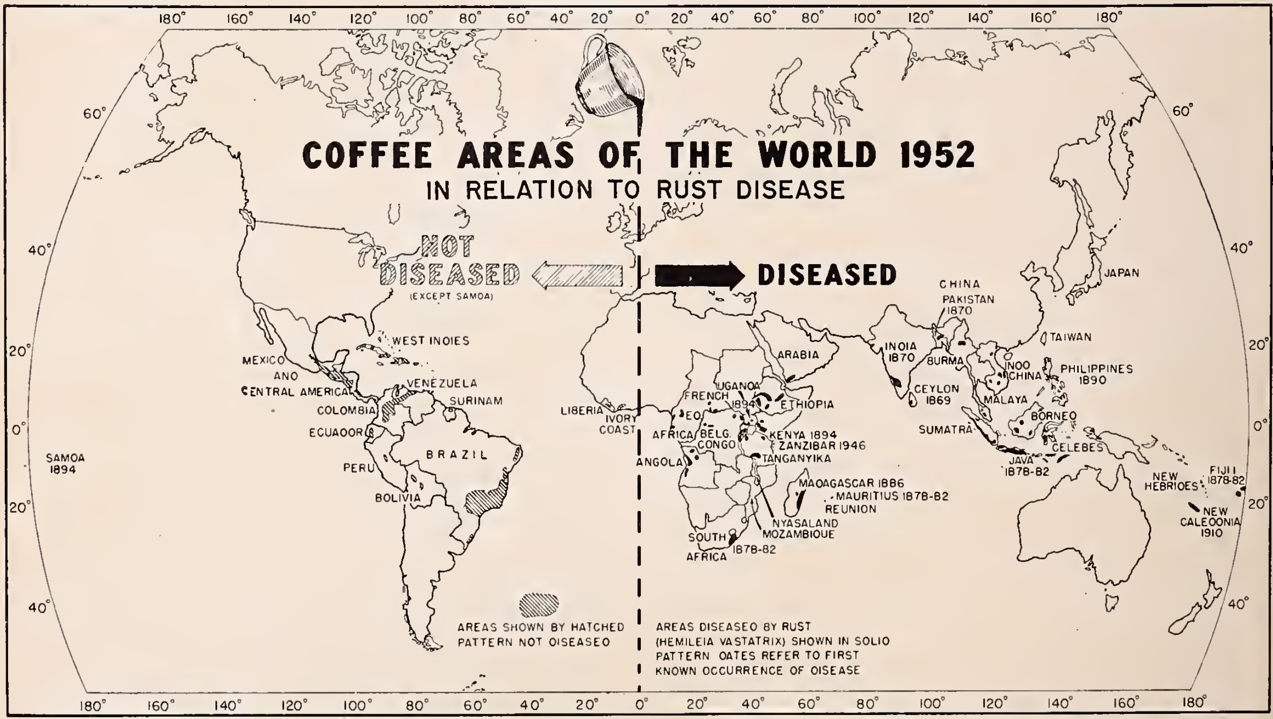
[4] The "free market" is the market on which the state buys agricultural products after delivery quotas are fulfilled. The price for goods sold on the free market is higher than that paid for products sold under delivery quotas. Prices prevailing on the black market may in some cases still be higher, so that the temptation to sell excess production on the black and not on the free market might be very great. However, the state has at least partial control over excess production due to the evidence obtained through contracting.

[5] In 1949-50, 1,120,000 single contracts were to be signed. According to Duris, then Minister of Agriculture, 97 percent were actually signed; 28,000 peasants, or 2.5 percent, refused to sign and had their tasks imposed by the authorities.



U.S. DEPARTMENT OF AGRICULTURE NEG. 1913 OFFICE OF FOREIGN AGRICULTURAL RELATIONS

This map shows that the coffee-producing world is divided into two parts. One part is infected with the rust, Hemileia, the most destructive of all coffee diseases. One part is free from it. No one knows why the easily transmitted rust has never spread to the Western Hemisphere. But growers, scientists, and governments of the Hemisphere are keenly aware that any day might bring it into the coffee fields of Tropical America. Planning against that day, Point IV has sent two U.S. Department of Agriculture scientists—Dr. Frederick L. Wellman and Dr. William H. Cowgill—on a 5-month tour of the rust-infected areas. They will collect propagating material from high-quality, rust-resistant trees and try to find out what control methods and studies have been carried out against the rust and how growers have learned to "live with it." As the scientists leave each area on their itinerary, they will send to the Office of Foreign Agricultural Relations an account of their observations. These accounts are available on request.

People and Point Four

This story portrays the human side of Point Four activities, the pitfalls, and the rewards.

By FORD M. MILAM

"Nothing is difficult for the person who knows how," a famous economic writer once said. "We do the simple things first and gradually move to more difficult problems by building on the foundation of our past experiences." This statement could almost be the keynote of the Point Four endeavor, for the purpose of Point Four is to assist peoples of other countries in acquiring enough "know how" to help themselves.

The late Henry G. Bennett, head of Point Four activities who died in a plane crash in Iran last December, once said in a talk with Latin American officials that it was not the purpose of Point Four to give away things outright, but rather to share our knowledge with others. Thus we lose nothing, since the knowledge remains with us, but others have gained from our experience, equipping themselves to solve their own problems.

A few years ago I was walking down the main street of Mexico City and saw an old Mexican woman sitting on the curb with oranges for sale. I noticed that she had only six oranges left, and when I asked how much they were, she replied that the cost was 5 centavos apiece. I offered to take all six; whereupon she looked up and said that if I bought all six oranges, I must pay 8 centavos apiece. I asked the reason for the 3-centavo increase and was told that if I bought all of the oranges, she would be put out of business.

I was impressed by her viewpoint and have found that thinking such as this, which differs greatly from our own, must be taken into consideration when we are working in other countries. We must, early in the initiation of cooperation with each country, become acquainted with their ways and adjust our activities accordingly.

Several years ago, when cooperative agricultural research stations or demonstration farms, public health centers, and educational facilities were being set up in Latin America, we were put into the position of dealing at first hand with the habits, customs, and problems of Latin Americans. Our technicians had definite ideas of how agricultural production could be immediately increased, but these ideas sometimes conflicted with local habits and preferences. For instance, varietal trials of corn were conducted in one country and a high yielding variety, a *yellow* corn, was found. It was soon learned, however, that in this particular country the people never ate yellow corn, regarding it as food for livestock and poultry only, while white corn was one of their staple foods. Therefore, we made no attempt to distribute the superior yellow corn seed for food purposes but continued our studies. Eventually a high yielding white corn was developed and, through its use, corn production in that country increased 25 percent in 2 years.

In 1949 I was detailed by the United States Department of Agriculture to the cooperative agricultural research station in El Salvador. Here I dealt with crop improvement, soils work, and fertilizer problems. I was well acquainted with the story about the yellow corn and was determined to benefit by that experience. The problem of grain sorghums as a source of human food was one of my first projects. I looked around the markets and found that a white-grained sorghum was being sold. We had the seed of a number of United States white-seeded sorghums that had already been tested in El Salvador and that were greatly superior in yield to this native type. The solution to this problem seemed simple: increase the seed of the better United States types and distribute it. Fortunately for me, however, I discussed this plan with other United States technicians and with Salvadoran scientists before putting it into operation. I learned that the United States types of sorghum did not pop well or make good tortillas, because the grain was much softer than that of the native type. We did succeed in giving the growers superior selections of sorghum for the production of livestock feed, but to my knowledge no United States sorghum has yet been found that will replace the native type.

Mr. Milam, North Carolina State College, Raleigh, is on leave of absence from the Point Four program to pursue further study.

Once while in El Salvador, I noticed some attractive floor mats, made from a native grass. These mats were available in a local market, but the price seemed too high. A few days later I was in a small village in another section of the country about 50 miles from the market. In the village was the little shop where these mats were made. I asked the man who made them how much one would cost; his price was exactly the same as that in the market 50 miles away. I told him if he would lower his price I would take all he had finished and he would not have to go 50 miles to dispose of his stock. He replied that he would rather not sell them there even at the market price, for then he would have nothing to take to market but money. With nothing but money, his position would be that of a customer and he would not enjoy the privilege of sitting on the sidewalk with his rugs and of being a prosperous merchant with stock to sell.

The only way he had to get to this market was to walk and carry the rugs on his back but, here again, "being in business" meant more to him than selling his wares on the spot. Viewpoints such as these are important factors in plans for the construction of central markets and for the proper disposal of local products. I know of several cases where merchants actually preferred crowded dark markets to more spacious, well-ventilated ones, while the women, who carry most of the vegetables and food in large baskets on their heads, prefer a sidewalk market to an enclosed one, for it is easier for them to move about in the open.

People have reasons for their preferences and customs. Let us not be led to the false conclusion that the United States has all the answers and that all we have to do is to distribute the facts. I wish the task were that simple. What we do have is the "know how" to attack the numerous problems. But many United States methods are not practical for other countries, so we must work with local personnel to develop suitable practices.

Point Four programs are not immune from criticism at home and abroad and I do not think we want them to be free from constructive criticism. However, human nature is the same everywhere: successes receive a minimum amount of publicity, while news of one small failure travels quickly. We must check and double check before new crops, management methods, fertility practices, and other innovations are recommended for wide use.

Many times we know the facts are correct, but because of some previous failure on a similar project, the people are reluctant to cooperate. An experience that the Rockefeller Foundation had in Mexico is an excellent example.

The Foundation drew up a cooperative agreement with the Mexican Government in 1944 for scientific development of the country's agricultural resources, and within a few years scientists had increased corn yields 25 percent. Once the corn program was well under way, attention was turned to the production of a rust-resistant wheat that could be produced during the rainy season, the best growing period in the Mexican weather cycle. Two high yielding strains were developed. The next step was to introduce this new seed to the Mexican farmers. But the farmers laughed when they were approached, because for the past 50 or 100 years all attempts to grow wheat during the wet season had failed miserably. The farmers were so convinced that it could not be done that they said that anyone weak enough to be taken in by the scheme would be the laughing stock of his community. No one would cooperate.

Finally a few scattered farmers agreed to try a small amount of the seed, merely to prove to the Rockefeller officials that their plan would not work. The seed had to be planted in isolated spots, where neighbors would not see it. The wheat was planted. It grew, did not contract wheat rust as predicted, and produced an excellent crop. Then, what an about-face there was among the cooperating farmers! They were so excited about the results that they took their neighbors to see the growing wheat. There was an immediate demand for large quantities of the rust-resistant wheat seed, and it was necessary to ration the release of the wheat. That was in 1947 and 1948. Today Mexico is producing wheat regularly during the wet season as a result of the Rockefeller Foundation's work.

Often farmers are reluctant to cooperate because they cannot afford to take a chance. In India, where I went in 1950 as one of the first two agricultural technicians assigned to that country under the Point Four program, I saw several signs of this reluctance. I do not believe you will ever find more humble, sincere, and well-meaning individuals than the Indian peasants. But they are just as skeptical as farmers in any other part of the world. They are eager to improve their yields and farming procedures but it must be definitely proved to them that the new is superior to the old before they will be willing to change. These people operate on such a small margin that it is not a matter of risking rupees—worth 20 cents each—but annas—worth 1.75 cents each. If the farmer has to lay out a few annas to try a new thing, it means he must be assured without doubt that it will be of use.

Prior to this time, just after World War II ended, I was in Korea and, one evening, was having dinner with the dean of the Korean agricultural college in Suwon. During the conversation I asked him how many children he had. He replied that he had two children and three girls. I thought this odd and, on further questioning, learned that it was the custom to name only the boys and to consider them "children," while the girls, though no less loved, were merely other members of the family. This was one of my first introductions to Korean custom, which was to prove an important factor in all our work there.

I had come to Korea with the American occupation forces, and my first assignment was as a food rationing and distribution officer for the capital city, Seoul, a metropolis of some 1.5 million people. We had to depend almost entirely on the meager rations from government stores, 187 in all, which the Japanese had built for Seoul. These stores were reopened and stocked with rice and grain collected from the countryside; the system worked satisfactorily but was rather difficult to manage with inexperienced Korean personnel.

Cutting sugarcane in India. Indian farmers wish to modernize their practices but they cannot afford to take a chance on unproved methods.

There was a bumper crop of rice in 1945 so Military Government officials decided to abandon the government stores and rationing and to place food distribution in the hands of private individuals. In October, then, a notice went out to all the papers telling the people that on a certain date there would be no more rationing of foodstuffs, and they would all be able to obtain their supplies through the free market. The day this announcement appeared, I had more than 100 requests for free rice. I could not figure out why I was getting these requests, for none had ever been made before. Finally my Korean interpreter told me that the morning's paper had said that rice was now on the "free" market, and these people had come to get their "free" rice! It had never occurred to me—and I am sure not to the officials who drafted the ordinance—that the people would place this interpretation on it. I have often thought back on that October day, with all its confusion brought on because one people interpreted instructions and regulations in a different way from what another people intended. The Koreans in all their lives had never heard of a free market, and decided that the Americans were going to give them their rice free of charge from now on.

Such innocent misinterpretation of statements by Point Four workers could easily be made unless they are careful to analyze the customs and habits of the people with whom they are working so as to be sure their suggestions are worded in such a manner as to be understood as they are intended.

During World War II, I also worked with farmers in the Far East. As a Military Government officer in the Okinawan campaign, I had charge of agricultural programs for the Okinawans and displaced persons of most of those islands. In June 1945 I accompanied the Eighth Regiment of the Second Marine Division on an invasion of a small island (Ihye Shima) 50 miles north of Okinawa.

At the time of the invasion, the rice on the island was about 6 inches high, and very little of it was damaged during the military activities. All of the people on this small island were moved to one village away from the coast.

As soon as the situation settled, I began seeking native personnel who had worked as directors of agriculture. I found four such men, but they seemed completely unconcerned about the present rice crop or the future agricultural program of their areas. I could see that the rice in the fields was withering from lack of water, yet these men told me that the situation was normal for the crop. It soon became apparent that the entire crop would be lost if something was not done. In desperation I called the four leaders together and asked them to tell me why they and their people were so unconcerned about their future food supply. One of the men finally volunteered to explain the people's attitude. He began by asking that nothing be done to his people as a result of his speaking; then he recalled how all of the rice on the island had been collected and rationed immediately after our arrival there. He said that though he knew this step was necessary, his people did not share his opinion. Furthermore, he said the people had asked him to approach me with the proposition that each family be permitted to cultivate, harvest, and store the rice from their own small areas of land. He explained that under this plan there would be plenty of rice for all of the people. I asked what would happen to those families with no land, for now they had no money with which to buy rice from others. The men explained that the farmers needed fish, salt, blacksmith work, hats, and a number of other items and services, so the people without land would catch the fish, manufacture the salt and other goods, perform the services, and be given rice for their labors. This request seemed reasonable and was granted.

The following day things began to happen. Men, women, and children were all out in the fields irrigating their small plots; groups of men were making ready for fishing; others began gathering materials to make hats and crude clothing. The rice crop matured and produced enough for the population of this island with some left over for export to small neighboring islands. It was illuminating to watch the progress once these people were given the right to care for their own private property and to make many of their own decisions.

Careful selection of United States personnel is highly important to the success of the Point Four program. It is not practical to send out technicians who will not appreciate the problems of other peoples. Our technicians must not only be competent scientists but also be able to size up problems quickly and adapt themselves to local conditions.

The philosophy of Point Four is based on the moral of this story: Helping others help themselves without interfering with their individual rights and freedoms.

Yogurt—Turkish Style

By H. H. KREIDER*

Yogurt, a cheeselike custard made from fermented milk, has long been a favorite food in the countries of the eastern Mediterranean. Only recently has it been popular enough in the United States to be sold by the big chain food stores and city dairies. American dairymen make yogurt from cow's milk, but the Turks, who gave yogurt its name, make it from the milk of ewes.

Ewe's milk is more plentiful in Turkey than cow's milk, for fully half of the country consists of grasslands far too scanty for pasturing cattle. Too, a ewe costs less than a cow—the first cost of a ewe is within reach of the average man's purse—and the returns are sooner coming. For these reasons, in much of Turkey a man's wealth is reckoned, as it was in Old Testament times, by the size and number of the flocks he owns. Through the centuries, Turks have developed a taste for ewe's milk.

Large flocks have always been kept near Istanbul and other large cities for the sole purpose of supplying yogurt to these centers. Recently, the use of light trucks and motorboats has increased the area from which the morning's milk can be drawn for tomorrow morning's delivery of yogurt.

Mucn ot Turkey's yogurt is still sold in the bulk trom peddlers' leat-covered trays. Individually packaged yogurt generally goes to hotels and restaurants.

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Ewes provide the milk for yogurt in Turkey. Two pints daily is an average yield. This dairyman lives in the Istanbul milkshed, at Rumeli Hisar.

Fresh ewe's milk is delivered to the yogurt factories daily, in a variety of ways, by truck in modern containers, for instance, and by horseback in converted gasoline cans.

At a typical "yogurthane" beside a ferryboat station on the Gulf of Izmit, ewe's milk arrives all through the early forenoon by rowboat, donkeyback, spring-wagon, and truck. The milk is weighed in and checked for dilution, then it is poured into huge copper kettles, which are usually mounted over a simple fireplace, and heated.

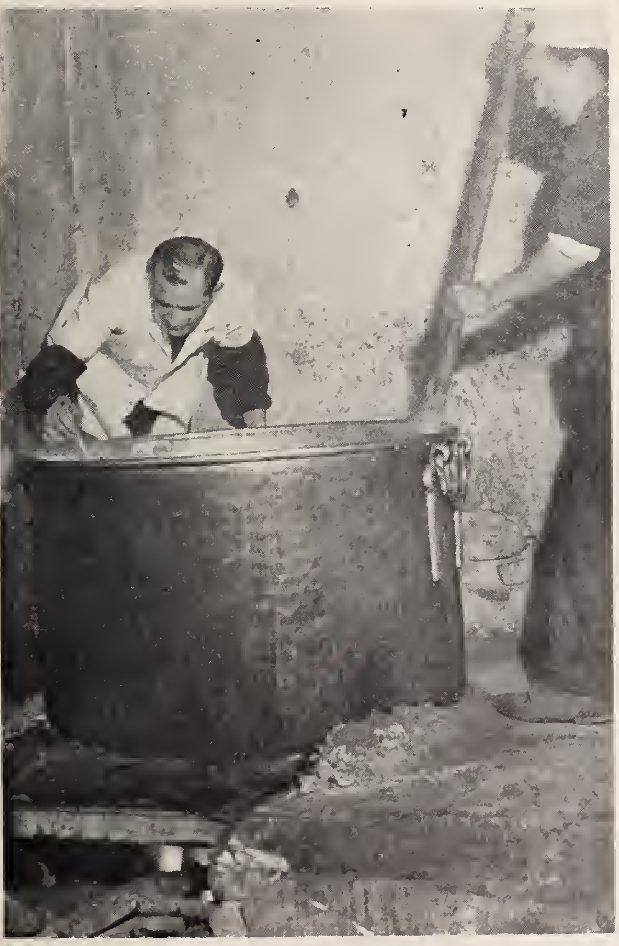
When the milk has been held at a temperature just short of boiling for a quarter-hour, it is transferred to tins of several different popular sizes.

Before the milk has cooled more than a few degrees, charcoal embers are shoved into the narrow space under the bars supporting the tins. This secondary heating, it is believed, helps to prevent the cream from settling on the top and ensures a product of more uniform and pleasing consistency.

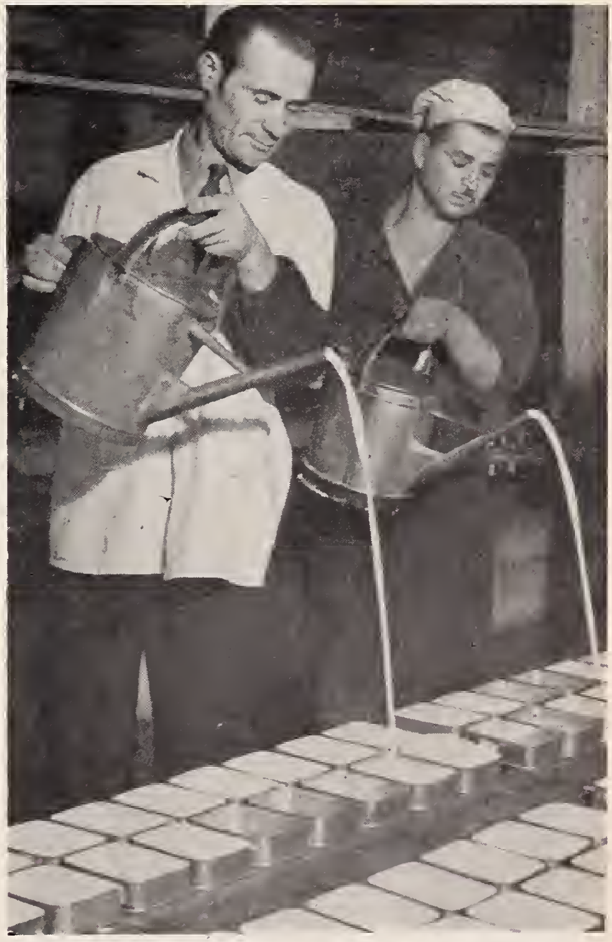
A little later, the charcoal is taken away, and the milk in the tins cools gradually to a temperature in the neighborhood of 115° F. At this point it is inoculated with a culture that is usually prepared from a previous batch of yogurt, carefully filtered for this purpose.

Using a small squirt gun almost as if it were a hypodermic needle, the operator punctures the still-foamy surface of the milk and shoots an ounce of the "starter" into the contents of each tin. Special blankets are then draped over the tins, and within 2 or 3 hours the yogurt has set to the consistency of a smooth, firm custard.

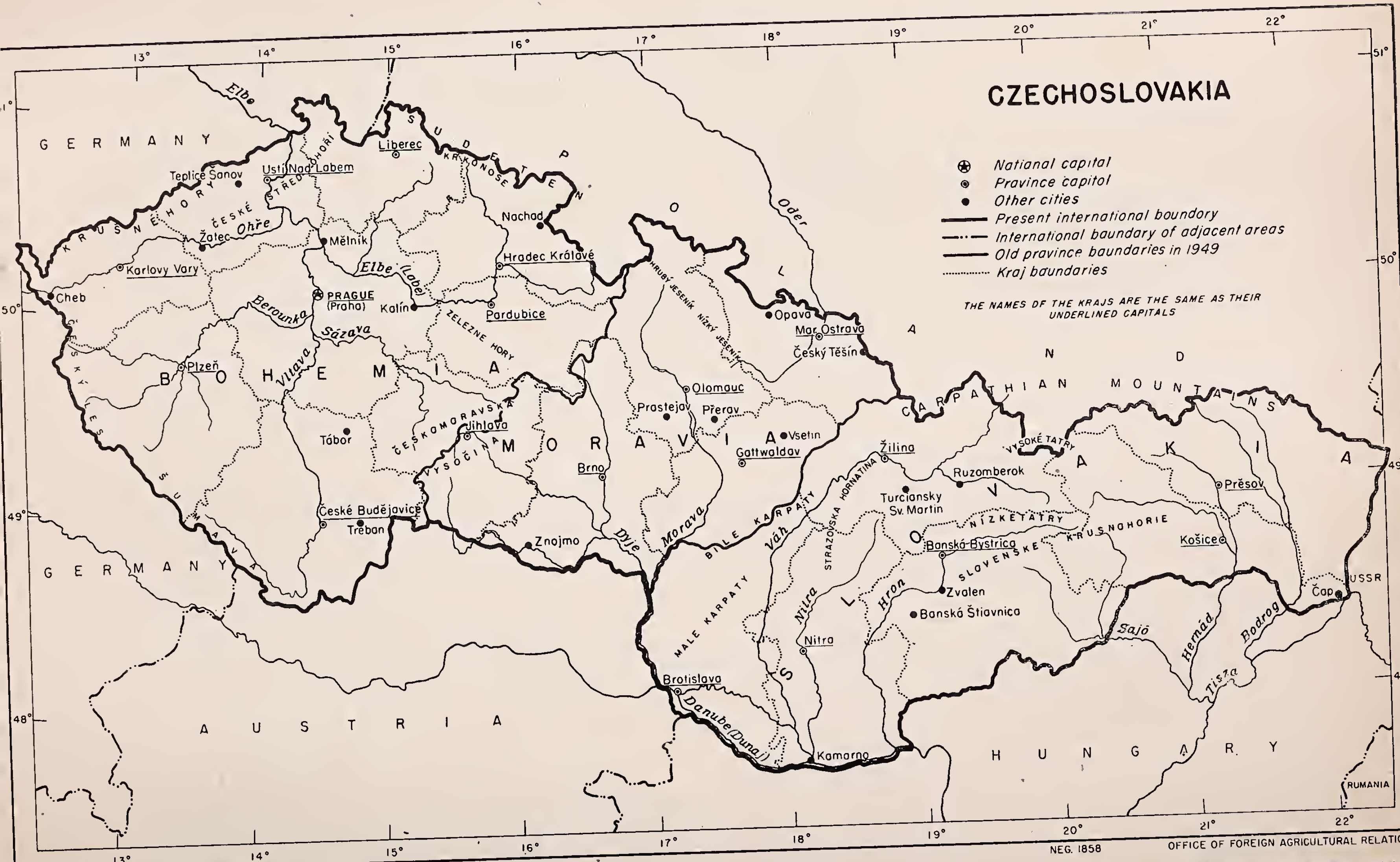
Before the days of individual packaging, yogurt was always poured into large circular pans, 2 to 3 inches deep, and carried to market in them. Much of it is still sold in these pans. Every morning and evening, peddlers go from door to door in the residential areas with their pairs of circular yogurt pans swinging from the ends of a yoke balanced on one shoulder. In restaurants, and in some homes, yogurt, which was motor-delivered to the city sometime during the night before, is served in individually wrapped tins.



Heating ewe's milk is the first step in the preparation of yogurt in Turkey. The foreman in this yogurt factory at Yalova is checking the temperature of the milk.



Pouring the steaming milk into small tins takes a steady hand. The hot milk, plus a carefully filtered culture, becomes yogurt in 2 to 3 hours.



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